Technical Information

Specifications for Macintosh Performa 6360 series computers

Technical Information

Main unit

Processor

A PowerPC™ 603e processor with the following features:

- 160 megahertz (MHz) processor clock
- built-in floating point unit (FPU)
- 40 MHz system bus
- 32 kilobytes (K) internal cache (16K data, 16K instructions)

Memory

- 16 megabytes (MB) of dynamic random-access memory (DRAM), expandable to a maximum of 136 MB in two sockets.

  The main logic board has 8 MB soldered to it, and an 8-MB DRAM Dual Inline Memory Module (DIMM) is installed in one of the sockets. DRAM DIMMs installed later should be 64-bit wide, 168-pin fast-paged mode, with 70-nanosecond (ns) RAM access time or faster.
- 1 MB of built-in video RAM (VRAM)
- 4 MB of read-only memory (ROM)
- 8 kilobytes (K) of nonvolatile parameter memory
- one socket for an optional High Performance Module (256K level 2 cache)

Internal disk drives

The following drives were installed in your computer at the factory:

- Apple SuperDrive 1.4 MB high-density floppy disk drive
- Apple ATA (AT Attachment) hard disk drive, also known as an Integrated Device Electronics (IDE) hard disk drive

Some Macintosh Performa computers have a built-in SCSI CD-ROM drive (5.25-inch, 1/2-height 8x-speed).

CD-ROM specifications

- Disc diameter — 120 millimeters (mm) (4.7 inches) and 80 mm (3.2 inches)
- Scanning velocity — 1.2–1.4 meters per second (normal speed)
- Rotation speed (varies over radius):
  - Normal speed — ~530 to 230 revolutions per minute (rpm)
  - Double speed — ~1060 to 460 rpm
  - Eight-times speed — ~4240 to 1840 rpm
- Average latency (varies over radius):
  - Normal speed — ~55 to 130 milliseconds (ms)
  - Double speed — ~27.5 to 65 ms
  - Eight-times speed — ~6.88 to 16.25 ms
- Blocks per rotation — ~8.4 to 19.5 variable
- Average access time (typical):
  - Normal speed — 380 ms
  - Double speed — 270 ms
  - Eight-times speed — 160 ms

Data

- Data capacity — 656 megabytes (MB), Mode 1; 748 MB, Mode 2
- Number of blocks per disc — 336,150
- Data per block — 2048 bytes, Mode 1; 2336 bytes, Mode 2
- Address description — Minutes, seconds, blocks

Audio capacity

- Playing time — 74 minutes, 42 seconds

Modes supported

- Audio CD
- CD-ROM — Modes 1 and 2
- CD-ROM XA — Mode 2, Forms 1 and 2
- CD-I — Mode 2, Forms 1 and 2
- CD-I — Ready
- CD-I — Bridge
- Photo CD — Single session and multisession
- Video CD
- CD-WO

Data streaming and transfer rates

- Blocks per second:

Normal speed	75
Double speed	150
Eight-times speed	600

- User kilobytes (K) per second:

Normal speed	150K, Mode 1 171.1K, Mode 2
Double speed	300K, Mode 1 342.2K, Mode 2
Eight-times speed	1200K, Mode 1 1368.8K, Mode 2

- SCSI bus burst rate (typical):

Asynchronous	5.0 MB per second
Synchronous	10.0 MB per second

Laser

- Type: Semiconductor GaAlAs laser
- Wavelength: 770 to 795 nanometers
- Output power: 0.2 to 0.6 milliwatts
- Beam divergence: 55°

Video modes

External monitors supported

Your computer can be connected to the following monitors and supports the resolutions indicated with an X:

	640 x 480	800 x 600	832 x 624	1024 x 768
Apple Basic Color Monitor (14")	x			
Apple Color Plus 14" Display	x			
Apple High Resolution RGB Monitor (13")	x			
Apple Multiple Scan 14 Display	x	x	x	
Apple Multiple Scan 15 Display	x	x	x	x
Apple Multiple Scan 17 Display	x	x	x	x
Apple Multiple Scan 1705 Display	x	x	x	x
Apple Multiple Scan 20 Display	x	x	x	x
AppleVision 1710 Display	x	x	x	x
AppleVision 1710AV Display	x	x	x	x
Macintosh Color Display (14")	x			
VGA	x	x	x	x

Resolutions that can be displayed are limited to those at the vertical scan rates specified in the next table.

The computer is strong enough for you to place on top of it any monitor that is 15 inches or smaller.

Graphics modes supported

Your computer can display the graphics modes listed in the following table. In addition, your computer can display video input on some of the modes.

Resolution	Color depth	Vertical scan rate	Video input supported
640 x 480	16-bit	60 Hz and 67 Hz	yes
800 x 600	16-bit	60 Hz	yes, 8-bit or less color depth
800 x 600	8-bit	72 Hz	no
832 x 624	8-bit	75 Hz	yes
1024 x 768	8-bit	60 Hz and 70 Hz	no

Video input

With the optional video input card, you can view and record video from a video camera, VCR, or other video equipment. (If the optional Apple TV/FM Radio System is also installed, you can record video from broadcast or cable television.)

- Format: composite or S-video
- Transmission format: industry standard NTSC/PAL/SECAM
- Polarity: sync negative
- Level: 0.8 volts peak-to-peak (Vpp) minimum to 2.0 Vpp maximum ("S" chroma level 1.4 Vpp maximum)
- Impedance: 75 ohms (Ω) internally terminated
- DC offset: +/– 1.0 volts (V) maximum

Sound

- 16-bit stereo input
- 16-bit stereo output featuring SRS(●) 3D Surround Sound technology*
- Sample rates of 11.025, 22.05, and 44.1 kilohertz (kHz)
- Sound input connector line level: 2 volts peak-to-peak (Vpp) maximum, into 10-kilohms (kΩ) impedance
- Sound output connector line level: 2 Vpp maximum, into 32-Ω impedance
- Signal-to-noise ratio (SNR): 75 decibels (dB) minimum, 80 dB typical (A-weighted, 2 Vpp output, 1 kHz, digital record and playback, sound input port to sound output port, with SRS(●) 3D Surround Sound disabled)
- Frequency response: 20 Hz–18 kHz (-3 dB relative to 1 kHz under the same conditions as the SNR measurement)

More information about the sound input and output ports on your computer is contained in the later section, "Interfaces."

*You can hear SRS 3D Surround Sound through your computer's sound output port but not through the headphone jack on the computer or on your monitor (if your monitor has one).

Clock/calendar

- CMOS custom circuitry with long-life battery

WARNING If the clock begins to lose accuracy, see your Apple-authorized dealer or service provider for a battery replacement. Do not attempt to replace the clock battery yourself.

Keyboard

- Supports all Apple Desktop Bus (ADB) keyboards

Mouse

- Supports all models of the ADB mouse

Interfaces

- One Apple Desktop Bus (ADB) port supporting up to three ADB input devices (such as a trackball, keyboard, or mouse) daisy-chained through a synchronous serial bus.
- One internal expansion slot supporting 6.88-inch 15-watt PCI (peripheral component interconnect) expansion cards. Install only an expansion card that comes with Macintosh drivers and is compliant with the PCI 2.0 standard. A NuBus™ card cannot be used in this expansion slot.
- One internal expansion slot supporting a communication card, such as an internal modem or Ethernet card. (Depending on the configuration of your computer, a modem card may already be installed in this slot.)
- One internal expansion slot supporting a video input card (called the Apple Video System) using NTSC, PAL, and SECAM. (Depending on the configuration of your computer, a video input card may already be installed in this slot.)
- Port for optional internal TV/FM tuner card (called the Apple TV/FM Radio System). (Depending on the configuration of your computer, a tuner card may already be installed in this slot.)
- Two RS-232/RS-422 serial GeoPort-compatible ports.
- One 3.5-mm sound output port for a line-level device, such as powered loudspeakers, on the back of the computer.
- One 3.5-mm headphone jack on the front of the computer.
- One 3.5-mm sound input port for stereo sound input. The sound input port supports the Apple PlainTalk Microphone that comes with some Macintosh computers. In addition, the sound input port supports a standard stereo (miniplug-to-RCA) cable adapter for connecting stereo equipment to your computer. It does not support the Apple Omni microphone (the round microphone shipped with some earlier models of Macintosh) or the attenuated RCA adapter provided with some models of Macintosh.
- One external standard SCSI port that supports up to 6 external SCSI devices.

IMPORTANT Some older SCSI devices or SCSI devices not manufactured by Apple may require updated drivers. (A “driver” is special software that is installed in your System Folder.) Contact the device manufacturer for information on obtaining driver software.

Additional features

- Support for optional infrared remote control
- Front-panel push-button controls for volume
- Power on and off from keyboard and optional remote control (included with the optional Apple TV/FM Radio System)

Environment

Operating temperature

- 10° C to 40° C (50° F to 104° F)

Storage temperature

- -40° C to 47° C (-40° F to 116.6° F)

Relative humidity

- 5 percent to 95 percent noncondensing

Altitude

- Works below 3048 m (10,000 ft.)

Size and weight

Weight	Height	Width	Depth
Main unit			
7.7 kg*	109.5 mm	320 mm	419.5 mm
17 lbs.*	4.3 in.	12.6 in.	16.5 in.
Mouse			
0.11 kg	33 mm	61 mm	107 mm
4 oz.	1.3 in.	2.4 in.	4.2 in.

*Weight varies depending on type of hard disk and any optional equipment.

Power

AC line input

- Line voltage: 90–270 volts (V) alternating current, RMS single phase, automatically configured
- Frequency: 43–67 Hz
- Power: 150 watts maximum continuous

DC power

- Continuous output: 82 watts

Current type	Maximum current*
+5 V	9.3 A†
+5 V (trickle)	0.1 A
+3.3 V	5.0 A†
+12 V	2.6 A
–12 V	0.2 A

*Total power output cannot exceed 95 W.
†Not more than 9.3 A total combined current on +5 V and +3.3 V outputs.

CD-ROM drive

The following table shows typical power consumption for the internal CD-ROM drive.

Power consumption (typical)	
+5 V DC	350 milliamperes (mA)
+12 V DC	300 mA

Power requirements for devices you can connect

Apple Desktop Bus (ADB)

- Mouse draws up to 10 milliamperes (mA)
- Keyboard draws 25–80 mA (varies with keyboard model used)
- Maximum current available for all ADB devices and all serial devices: 500 mA

Note: The ADB port can support up to three daisy-chained ADB devices.

Audio and telecommunications devices

The following table shows power allowances for external devices connected to input ports.

Device	Voltage	Current	Power
Microphone	+5 V	1 mA	5 mW
GeoPort Telecom Adapter & ADB devices	+5 V	500 mA	2.5 W
S-video input connector	+12 V	250 mA	3 W

Expansion cards and devices

If you add an expansion card to your computer, make sure the component's power requirements don't exceed the maximum power allowances allocated to it by the computer. Power allowances are presented in the following table.

Device	Voltage	Current	Power
PCI expansion cards (15 watts)*	+3.3 V +5 V -12 V	2 A 3 A 500 mA	6.6 W 15 W 6 W
Communication expansion card†	+5 V +12 V	500 mA 100 mA	2.5 W 1.2 W
Video input expansion card‡	+5 V +12 V	200 mA 300 mA	1 W 3.6 W

*Each PCI expansion card should not consume more than 15 watts of power total.
†The communication card should not consume more than 2.5 watts of power total.
‡The video input card should not consume more than 4.6 watts of power total.